L Number	Hits	Search Text	DB	Time stamp
1	188	angelicin or dimethylangelicin	USPAT; US-PGPUB; DERWENT	2004/05/25 14:52
2	12490	phthalimide	USPAT; US-PGPUB; DERWENT	2004/05/25 14:53
3	51962	hydrazine	USPAT; US-PGPUB; DERWENT	2004/05/25 14:53
4	0	(angelicin or dimethylangelicin) SAME phthalimide same hydrazine	USPAT; US-PGPUB; DERWENT	2004/05/25 14:53
5	0	(angelicin or dimethylangelicin) SAME phthalimide	USPAT; US-PGPUB; DERWENT	2004/05/25 14:54
6	0	(angelicin or dimethylangelicin) SAME hydrazine	USPAT; US-PGPUB; DERWENT	2004/05/25 14:54
7	21	(angelicin or dimethylangelicin) and hydrazine	USPAT; US-PGPUB; DERWENT	2004/05/25 14:54
8	15	((angelicin or dimethylangelicin) and hydrazine) and phthalimide	USPAT; US-PGPUB; DERWENT	2004/05/25 14:55

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(FILE 'HOME' ENTERED AT 16:00:05 ON 25 MAY 2004)

FILE 'CAPLUS' ENTERED AT 16:00:20 ON 25 MAY 2004
L1 599 S (DIMETHYLANGELICIN OR ANGELICIN)
L2 2 S L1 AND HYDRAZINE
L3 4 S L1 AND PHTHALIMID?
L4 2 S L3 NOT L2
L5 2 S L2 AND L3
L6 2 S L5 NOT L4
L7 1182 S HYDRAZINE AND PHTHALIMID?
L8 399 S HYDRAZINE (P) PHTHALIMID?
L9 30 S L8 AND AMINOMETHYL
L10 17 S L8 (P) AMINOMETHYL
L11 1 S L10 AND PHOTO?
L12 0 S L8 AND METHYLANGELICIN?
L13 0 S L7 AND METHYLANGELICIN?
L14 0 S HYDRAZINE AND METHYLANGELICIN?
E GUITTO A/AU
L15 9 S E3-E4
L16 0 S L15 AND METHYLANGELICINS
L17 0 S L15 AND DNA
L18 1 S E3

FILE 'REGISTRY' ENTERED AT 16:24:50 ON 25 MAY 2004
E DIMETHYLANGELICIN/CN
E ANGLEICIN/CN

FILE 'CAPLUS' ENTERED AT 16:27:46 ON 25 MAY 2004
SELECT L6 2 RN

FILE 'REGISTRY' ENTERED AT 16:28:05 ON 25 MAY 2004
L19 11 S E1-E11

FILE 'CAPLUS' ENTERED AT 16:29:30 ON 25 MAY 2004
SELECT L4 2 RN

FILE 'REGISTRY' ENTERED AT 16:29:46 ON 25 MAY 2004
L20 18 S E1-E19
L21 0 S L20 AND MF C14 H13 N O3 . CL H /MF
L22 1 S L20 AND C14 H13 N O3 . CL H /MF

FILE 'CAPLUS' ENTERED AT 16:32:10 ON 25 MAY 2004
L23 7 S L22
L24 2 S L23 NOT PATENT/DT
L25 1 S L24 NOT L4
L26 5 S L23 NOT L24

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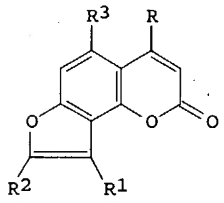
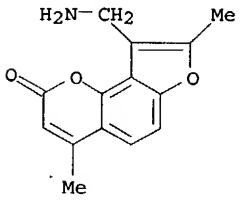
L25 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1981:76603 CAPLUS
DN 94:76603
TI Mutagenicity in Salmonella typhimurium of some angelicin derivatives proposed as new monofunctional agents for the photochemotherapy of psoriasis
AU Venturini, S.; Tamaro, M.; Monti-Bragadin, C.; Carlassare, F.
CS Inst. Microbiol., Univ. Trieste, Trieste, Italy
SO Mutation Research (1981), 88(1), 17-22
CODEN: MUREAV; ISSN: 0027-5107
DT Journal
LA English
GI



I

AB Nine angelicin derivs. I (R, R1, and R3 = H or Me, R2 = H, CH2OH, CH2OMe, or CH2NH2), which inhibit cell division and lack skin phototoxicity, were tested for their mutagenic activity with and without near-UV irradiation (NUV) in Salmonella typhimurium strains. After irradiation with NUV, the tested compds. induced different nos. of revertants in strain TA100, indicating that the mutational events involved are base substitutions. In the dark, 3 of the chems. behaved as frame-shift mutagens causing reversion in strain TA98.
IT **75663-42-2**
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(mutagenicity of)
RN 75663-42-2 CAPLUS
CN 2H-Furo[2,3-h]-1-benzopyran-2-one, 9-(aminomethyl)-4,8-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



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=> s l23 not l24
L26 5 L23 NOT L24

=> d 1-5 bib abs hitstr

L26 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:407978 CAPLUS
DN 135:15073
TI Reagents and methods for one-step nucleic acid release from cells and amplification/detection
IN Dattagupta, Nanibhushan; Sridhar, C. Nagaraja; Wu, Whei-kuo
PA Applied Gene Technologies, Inc., USA
SO U.S., 19 pp., Cont.-in-part of U.S. Ser. No. 146,579.
CODEN: USXXAM
DT Patent
LA English

10689586

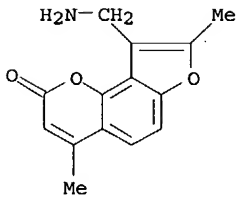
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6242188	B1	20010605	US 1999-385624	19990826
	US 6379930	B1	20020430	US 1999-384717	19990826
	WO 2002014548	A1	20020221	WO 2000-US22148	20000810
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2000067686	A5	20020225	AU 2000-67686	20000810
	US 2001031473	A1	20011018	US 2001-846603	20010430
	US 6448047	B2	20020910		
	US 2002061537	A1	20020523	US 2002-46786	20020114
PRAI	US 1999-146579P	P	19990730		
	US 1999-384717	A1	19990826		
	US 1999-385624	A1	19990826		
	WO 2000-US22148	A	20000810		

AB The present invention describes compns. and methods for releasing nucleic acids from cells in a form that is suitable for labeling/capture, amplification, or detection in a single reagent addition step. The compns. include a lipid, membrane fluidizing compound, enzyme for degrading cell structure, metal chelators, or one or more nucleic acid probes or primers complementary to the nucleic acid to be detected. The compns. are non-denaturing and non-inhibitory of enzymes or proteins that are used in nucleic acid release, amplification, labeling or detection. The invention also provides kits for performing the above methods. Thus, the synthesis of 3 new lipids for use in nucleic acid release from cells is described. Addnl., DNA-binding ligands BPA, BDA, AZPIMA, APIMA, and BPIMA which do not inhibit nucleic acid amplification enzymes were synthesized. Aqueous solns. containing lipids and enzymes and, optionally, probes/primers or DNA-binding ligands were prepared and used to release nucleic acids from, e.g., Escherichia coli and Staphylococcus aureus.

IT **75663-42-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reagents and methods for one-step nucleic acid release from cells and amplification/detection)

RN 75663-42-2 CAPLUS
CN 2H-Furo[2,3-h]-1-benzopyran-2-one, 9-(aminomethyl)-4,8-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



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RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:78227 CAPLUS
DN 114:78227
TI Photochemical nucleic acid-labeling reagent having a polyalkylamine spacer
IN Dattagupta, Nanibhushan; Albarella, James P.
PA Molecular Diagnostics, Inc., USA
SO U.S., 12 pp. Cont.-in-part of U.S. Ser. No. 690,336, abandoned.
CODEN: USXXAM
DT Patent
LA English

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	US 4950744	A	19900821	US 1987-27384	19870318
	FI 8600077	A	19860711	FI 1986-77	19860108
	AU 8652146	A1	19860717	AU 1986-52146	19860108
	AU 588563	B2	19890921		
	JP 61164160	A2	19860724	JP 1986-819	19860108
	ES 550736	A1	19871201	ES 1986-550736	19860108
	DK 8600095	A	19860711	DK 1986-95	19860109
	ZA 8600164	A	19860924	ZA 1986-164	19860109
	CA 1293939	A1	19920107	CA 1988-561380	19880314
	US 5026840	A	19910625	US 1990-475639	19900206
PRAI	US 1985-690336		19850110		
	US 1987-27384		19870318		

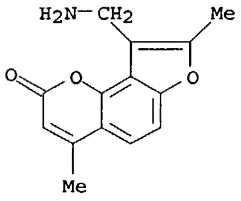
OS MARPAT 114:78227

AB A photochem. nucleic acid-labeling reagent, QN(R)[(CH2)xN(R)]yL (Q = photoreactive residue of a nucleic acid-binding ligand; L = label residue; R = H, C1-7 alkyl, aryl, OH, C1-7 alkoxy; x = 2-7; y = 3-10; R and x can be the same or different each time they appear in the formula), is useful in efficiently labeling nucleic acids, e.g. for detection in hybridization assays. 4'-Formyl-4,5'-dimethylangelicin (preparation given) was reacted with N1-(biotinylamido)-N4,N9-dimethylspermine (preparation given) and the product, biotinyl-spermine3+-angelicin, was used to photochem. label DNA.

IT **75663-42-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of photochem. nucleic acid-labeling reagent)

RN 75663-42-2 CAPLUS

CN 2H-Furo[2,3-h]-1-benzopyran-2-one, 9-(aminomethyl)-4,8-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



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L26 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1988:183297 CAPLUS

DN 108:183297

TI Method and kit for rapid detection of nucleic acid sequences in a sample by labeling the sample

IN Dattagupta, Nanibhushan; Rae, Peter M. M.; Rabin, Daniel U.; Huguenel, Edward D.

PA Molecular Diagnostics, Inc., USA

SO Eur. Pat. Appl., 29 pp.
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

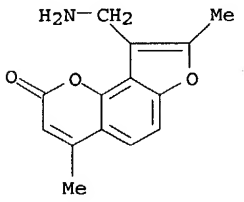
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 235726	A2	19870909	EP 1987-102577	19870224
	EP 235726	A3	19890510		
	EP 235726	B1	19930519		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
	NO 8700613	A	19870907	NO 1987-613	19870217
	CA 1295535	A1	19920211	CA 1987-530235	19870220
	AT 89606	E	19930615	AT 1987-102577	19870224
	FI 8700923	A	19870906	FI 1987-923	19870303
	DK 8701120	A	19870906	DK 1987-1120	19870304
	ZA 8701554	A	19871230	ZA 1987-1554	19870304
	AU 8769723	A1	19870910	AU 1987-69723	19870305
	AU 599083	B2	19900712		
	JP 62265999	A2	19871118	JP 1987-51169	19870305
	CA 1314794	A1	19930323	CA 1987-553597	19871204
	US 5348855	A	19940920	US 1991-772625	19911004
PRAI	US 1986-836378		19860305		

US 1986-943006 19861229
EP 1987-102577 19870224
US 1987-24643 19870311

AB A method for detecting ≥1 microorganism or polynucleotide sequence from eukaryotic sources in a nucleic acid-containing sample comprises (a) labeling the nucleic acids in the test sample; (b) immobilizing an oligonucleotide or a single-stranded nucleic acid of ≥1 known microorganism or sequences from eukaryotic sources to make ≥1 probe; (c) contacting, under hybridization conditions, the labeled single-stranded sample nucleic acid and the immobilized probe to form a hybridized labeled nucleic acid; and (d) assaying for the hybridized nucleic acid by detecting the label. A kit comprises immobilized probe, reagent for labeling the sample nucleic acids, reagent for denaturing the nucleic acids, and hybridization reagents. Urine samples from patients with suspected urinary tract infections were centrifuged, treated with NaOH, and heated to 100° to lyse the cells. The suspension was diluted with Na borate buffer and neutralized to pH 7. Biotin-PEG-angelicin (preparation described) was added and the mixture was irradiated with a long-wavelength UV lamp for 15 min. The irradiated sample was added to hybridization reagents and hybridization was conducted with probes (whole genomic DNA of Escherichia coli, Klebsiella pneumoniae, Proteus vulgaris, etc.) immobilized onto nitrocellulose paper. Hybridization was detected by an immunogold assay with affinity-isolated goat anti-biotin antibody and Ag enhancement. A spot of human DNA was also present on the paper for detection of leukocytes.

IT **75663-42-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of photochem. labeling compound for nucleic acids)

RN 75663-42-2 CAPLUS
CN 2H-Furo[2,3-h]-1-benzopyran-2-one, 9-(aminomethyl)-4,8-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



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L26 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1988:164418 CAPLUS
DN 108:164418
TI Preparation and use of reagents for a single probe solution-phase hybridization assay for the detection of a nucleotide sequence, and kits containing the reagents
IN Dattagupta, Nanibhushan
PA Molecular Diagnostics, Inc., USA
SO Eur. Pat. Appl., 50 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 237833	A2	19870923	EP 1987-102576	19870224
	EP 237833	A3	19910116		
	EP 237833	B1	19930113		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
	CA 1290664	A1	19911015	CA 1986-526423	19861229
	NO 8700612	A	19870907	NO 1987-612	19870217
	AT 84574	E	19930115	AT 1987-102576	19870224
	ES 2053457	T3	19940801	ES 1987-102576	19870224
	FI 8700922	A	19870906	FI 1987-922	19870303
	DK 8701121	A	19870906	DK 1987-1121	19870304
	ZA 8701555	A	19871125	ZA 1987-1555	19870304
	AU 8769724	A1	19870910	AU 1987-69724	19870305

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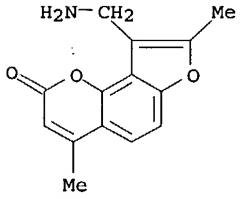
	JP 62282599	A2	19871208	JP 1987-51170	19870305
	US 4968602	A	19901106	US 1989-442423	19891121
PRAI	US 1986-836360		19860305		
	US 1986-927613		19861114		
	EP 1987-102576		19870224		

AB A particular nucleic acid sequence of clin. significance can be rapidly determined by a homogeneous single-probe hybridization assay. The test sample containing chemical modified nucleic acids having a label (or a reactive site) will hybridize with a nucleic acid probe carrying a reactive site (or a label). The hybrids are selectively separated out by contacting then with an immobilized reactive partner. The hybrid and the reactive partner form a stable bond, and the extent of hybridization can be measured by determining the label in the immobilized fraction or a decrease in the label in the remaining solution The homogeneous single-probe hybridization method, as described above was employed to detect the presence of α-thalassemia in prenatal samples (no data). The sample nucleic acid and the probe were labeled photochem. with biotin and 4'-aminomethyl-4,5' di-Me angelicin, resp.

IT **75663-42-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of hybridization probe label)

RN 75663-42-2 CAPLUS

CN 2H-Furo[2,3-h]-1-benzopyran-2-one, 9-(aminomethyl)-4,8-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



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L26 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1981:497766 CAPLUS

DN 95:97766

TI Furocoumarins and their use in the photochemotherapy of psoriasis and other skin diseases

IN Baccichetti, Francarosa; Bordin, Franco; Dall'Acqua, Francesco; Guiotto, Adriano; Pastorini, Giovanni; Rodighiero, Giovanni; Rodighiero, Paolo; Vedaldi, Daniela; Fitzpatrick, Thomas Bernard; et al.

PA Consiglio Nazionale delle Ricerche, Italy

SO Ger. Offen., 60 pp.
CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3031164	A1	19810312	DE 1980-3031164	19800818
	DE 3031164	C2	19860821		
	BE 884813	A1	19801201	BE 1980-47245	19800814
	GB 2061726	A	19810520	GB 1980-26581	19800814
	US 4312883	A	19820126	US 1980-178292	19800815
	CA 1162929	A1	19840228	CA 1980-358489	19800818
	FR 2463616	A1	19810227	FR 1980-18129	19800819
	FR 2463616	B1	19840427		
	NL 8004699	A	19810224	NL 1980-4699	19800820
	NL 190448	B	19931001		
	NL 190448	C	19940301		
	JP 56030982	A2	19810328	JP 1980-114606	19800820
	JP 59019957	B4	19840509		
	AT 8301008	A	19840915	AT 1983-1008	19830322
	AT 377763	B	19850425		
PRAI	IT 1979-84134		19790820		
	AT 1980-4222		19800819		

OS CASREACT 95:97766

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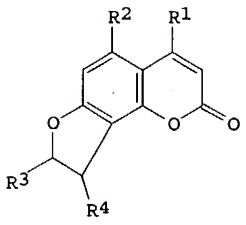

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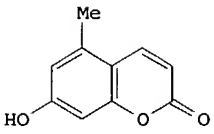

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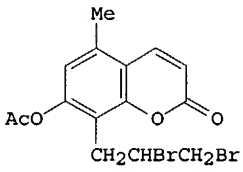


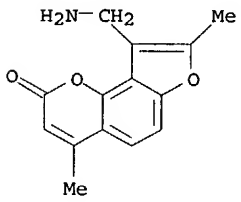
III

AB Furocoumarins I [R1, R3 independently = H, alkyl; R2 = H, alkyl, MeO, O(CH2)nNR5R6; R4 = H, alkyl, MeOCH2, HOCH2, AcOCH2, (CH2)nNR5R6, (CH2)nO(CH2)mNR5R6 (R5, R6 = H, alkyl, n, m = 1-3] and their pharmaceutically tolerable salts, useful for the photochemotherapy of psoriasis, were prepared 5,5'-Dimethylangelicin (I, R1 = R4 = H, R2 = R3 = Me) was prepared in 6 steps from the cyclization of 5-MeC6H3(OH)2-1,3 with (Z)-HO2CCH:CHCO2H (to give hydroxycoumarin II) via the cyclization of (dibromopropyl)coumarin III. Formation parameters for complexes of I with DNA, I inhibitory activity against DNA and RNA synthesis in Ehrlich-Ascites tumor cells, and inhibitory activity against epidermal DNA synthesis in mice were tabulated.

IT **75663-42-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and DNA and RNA synthesis inhibitory activity of)

RN 75663-42-2 CAPLUS

CN 2H-Furo[2,3-h]-1-benzopyran-2-one, 9-(aminomethyl)-4,8-dimethyl-, hydrochloride (9CI) (CA INDEX NAME)



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=> d 1-2 bib abs kwic

L2 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:646186 CAPLUS
DN 133:233563
TI Labeling of nucleic acid amplicons with photoreactive materials to prevent contamination in amplification procedures
IN Dattagupta, Nanibhushan; Sridhar, C. Nagaraja; Wu, Whei-Kuo
PA Applied Gene Technologies, Inc., USA
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000053809	A2	20000914	WO 2000-US6183	20000308
	WO 2000053809	A3	20020207		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6187566	B1	20010213	US 1999-265127	19990309
	EP 1192272	A2	20020403	EP 2000-916197	20000308
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002538478	T2	20021112	JP 2000-603430	20000308
	NZ 514707	A	20031031	NZ 2000-514707	20000308
	ZA 2001007390	A	20021206	ZA 2001-7390	20010906
PRAI	US 1999-265127	A	19990309		
	WO 2000-US6183	W	20000308		

AB This invention relates to methods of amplifying nucleic acids to minimize contamination by products of earlier amplification reactions. More particularly, it relates to methods of using nucleic acid labels that inhibit further amplification of the amplicon, and compns. that are useful to accomplish this task. In particular, the present invention relates to photoreactive complexes of a binding ligand, a binding enhancer and a label that can be used to degrade or modify the labeled DNA to prevent it being used as a template for enzymic amplification. The binding ligand is a photoreactive chemical moiety that can reversibly bind to DNA. It may be an intercalating dye, but this is not essential. The enhancer moiety, which may be the same as the binding ligand, increases the binding of the label to nucleic acid. The label may be an affinity label that can be used to isolate the labeled nucleic or a reactive moiety that can degrade it. Synthesis of acridine and **angelicin** derivs. is described.

AB This invention relates to methods of amplifying nucleic acids to minimize contamination by products of earlier amplification reactions. More particularly, it relates to methods of using nucleic acid labels that inhibit further amplification of the amplicon, and compns. that are useful to accomplish this task. In particular, the present invention relates to photoreactive complexes of a binding ligand, a binding enhancer and a label that can be used to degrade or modify the labeled DNA to prevent it being used as a template for enzymic amplification. The binding ligand is a photoreactive chemical moiety that can reversibly bind to DNA. It may be an intercalating dye, but this is not essential. The enhancer moiety, which may be the same as the binding ligand, increases the binding of the label to nucleic acid. The label may be an affinity label that can be used to isolate the labeled nucleic or a reactive moiety that can degrade it. Synthesis of acridine and **angelicin** derivs. is described.

ST nucleic acid amplification contamination control photoreactive dye; azodintrobenzene deriv nucleic acid amplification contamination control; acridine deriv nucleic acid amplification contamination control; **angelicin** deriv nucleic acid amplification contamination control

IT 523-50-2DP, **Angelicin**, derivs. 293328-76-4P
RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(preparation of, for labeling of DNA; labeling of nucleic acid amplicons with photoreactive materials to prevent contamination in amplification procedures)

IT 75-50-3, reactions 98-59-9, p-Toluenesulfonyl chloride 110-15-6, Butanedioic acid, reactions 421-20-5, Methylfluorosulfonate 558-13-4, Carbon tetrabromide 603-35-0, Triphenylphosphine, reactions 629-11-8, 1,6-Hexanediol 1074-82-4, Potassium phthalimide 5336-90-3, 9-Acridine

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carboxylic acid 7719-09-7, Thionyl chloride 7803-57-8, **Hydrazine** hydrate 13071-60-8 23491-44-3, Bisbenzimidazole 34071-95-9 35013-72-0 47165-04-8, Dapi 80500-62-5, 4'-Aminomethyl-4,5'-**dimethylangelicin** 102568-43-4 293328-78-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactions of; labeling of nucleic acid amplicons with photoreactive materials to prevent contamination in amplification procedures)

L2 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1989:550062 CAPLUS
DN 111:150062
TI Nucleic acid sequence determination by hybridization probe and its use in the identification of microorganisms and prokaryotic or eukaryotic DNA and in clinical diagnosis
IN Dattagupta, Nanibhushan; Rabin, Daniel; Rae, Peter; Huguenel, Edward
PA Molecular Diagnostics, Inc., USA
SO Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 281927	A2	19880914	EP 1988-103221	19880303
	EP 281927	A3	19910417		
	EP 281927	B1	19950628		
	R: CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
	CA 1314794	A1	19930323	CA 1987-553597	19871204
	AU 8812151	A1	19880915	AU 1988-12151	19880223
	AU 601021	B2	19900830		
	JP 63313598	A2	19881221	JP 1988-56517	19880311
	US 5348855	A	19940920	US 1991-772625	19911004
PRAI	US 1987-24643		19870311		
	US 1986-836378		19860305		
	US 1986-943006		19861229		

AB A method for the detection and identification of microorganisms or nucleic acid sequences in a test sample comprises: (1) labeling the nucleic acids in the sample, (2) contacting the labeled nucleic acids with ≥1 immobilized probe containing complementary nucleic acids under hybridization conditions, and (3) detecting the label. The labeling compound 4'-biotinyl-PEG-4,5'-**dimethylangelicin** (I) was prepared In α-thalassemia diagnosis, a test sample containing nucleic acid was dissolved in 10 mM borate buffer (pH 8.0) to a final concentration of .apprx.20 μg/mL. To the nucleic acid solution I in aqueous solution was added to a final concentration of 10 μg/mL. The mixture was then irradiated at long wavelength irradiation for .apprx.60 min using a black ray UVL 56 lamp. The labeled test sample was hybridized with probes immobilized on a nitrocellulose strip at 42° for 16 h and the biotinylated hybrids were detected by a colorimetric or chemiluminescence method.
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IT 113072-75-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with **angelicin** derivative)
IT 113072-74-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with **hydrazine**)
IT 113072-75-6DP, reaction product with **dimethylangelicin**
122862-82-2DP, reaction product with biotin-PEO derivative
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as label for nucleic acid detection by hybridization assay)

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> d 1-2 bib abs kwic

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1991:558971 CAPLUS
DN 115:158971
TI Process for the preparation of di- and trialkyl(**phthalimidomethyl**)furocumarins
IN Mikhail, Gamal; Buysch, Hans Josef
PA Bayer A.-G., Germany
SO Ger. Offen., 5 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3940597	A1	19910613	DE 1989-3940597	19891208
	US 5099031	A	19920324	US 1990-608046	19901031
PRAI	DE 1989-3940597		19891208		

OS CASREACT 115:158971
AB A process for the preparation of dialkyl(**phthalimidomethyl**)- and trialkyl(**phthalimidomethyl**)furocoumarins comprises the condensation reaction of di- or trialkylfurocoumarins with an (alkoxymethyl)- or (carboxymethyl)**phthalimide**. Processes comprising the use of 4,5'-dialkylangelicin or 4,5',8-trialkylpsoralen are claimed. A mixture of F3CSO3H (7.33 g) and F3CCO2H (60 mL) was added to a mixture of bis(**phthalimidomethyl**) ether (18.83 g), 4,5'-**dimethylangelicin** (10.5 g), and F3CCO2H (100 mL) to give 83% 4,5'-dimethyl-4'-**phthalimidoangelicin**.
TI Process for the preparation of di- and trialkyl(**phthalimidomethyl**)furocumarins
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ST alkylphthalimidomethyl furocoumarin condensation alkoxymethylphthalimide; furocoumarin alkylphthalimidomethyl condensation alkoxymethylphthalimide; **angelicin** alkylphthalimidomethyl; psoralen alkylphthalimidomethyl; coumarin furo alkylphthalimidomethyl
IT 3902-71-4, Trioxsalen
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction of, with bis(**phthalimidomethyl**) ether)
IT 4063-41-6, 4,5'-**Dimethylangelicin**
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction of, with bis(**phthalimidomethyl**) ether or (hydroxymethyl)**phthalimide**)
IT 118-29-6, N-(Hydroxymethyl)**phthalimide**
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction of, with **dimethylangelicin**)
IT 41997-10-8, Bis(**Phthalimidomethyl**) ether
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction of, with **dimethylangelicin** or trioxsalen)

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1981:58098 CAPLUS
DN 94:58098
TI New monofunctional reagents for DNA as possible agents for the photochemotherapy of psoriasis: derivatives of 4,5'-**dimethylangelicin**
AU Dall'Acqua, Francesco; Vedaldi, Daniela; Caffieri, Sergio; Guiotto, Adriano; Rodighiero, Paolo; Baccichetti, Francarosa; Carlassare, Francesco; Bordin, Franco
CS Inst. Pharm. Chem., Padova Univ., Padua, 35100, Italy
SO Journal of Medicinal Chemistry (1981), 24(2), 178-84
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
GI

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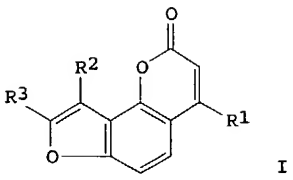

I

AB The title compds. I (R1 and R3 = H or Me; R2 = CH2OH, CH2OMe, CH2NH2, etc.) were prepared from 4,5'-**dimethylangelicin** [4063-41-6] and evaluated for their capacity to form an intercalated complex with native DNA and to ascertain their ability to photobind through monofunctional addns. to the same macromol. Their lack of skin phototoxicity was confirmed on guinea pig skin, and the photobiol. activity was determined on Ehrlich ascites tumors, where DNA and RNA syntheses were inhibited, and on T2 phage, where infectivity was decreased. In photoreactions with DNA, I formed only monofunctional adducts, and as such did not induce skin phototoxicity typical of psoralens. Photobinding to DNA in the ground state was different for each derivative 4-(Hydroxymethyl)-4,5'-**dimethylangelicin** [75663-40-0] showed the highest photobiol. activity, complete lack of skin phototoxicity, and very low mutagenic activity.

TI New monofunctional reagents for DNA as possible agents for the photochemotherapy of psoriasis: derivatives of 4,5'-**dimethylangelicin**

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ST **angelicin** deriv prepn photochemotherapy psoriasis

IT Psoriasis
(**dimethylangelicin** derivs. for photochemotherapy of)

IT 107-30-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkylation by, of **dimethylangelicin**)

IT 75663-43-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with potassium **phthalimide**)

IT 1074-82-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with (chloromethyl)**dimethylangelicin**)

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=> d l15 9 bib abs

L15 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:714149 CAPLUS
DN 123:169556
TI Carbonyl Oxide Chemistry. 4. Novel Observations on the Behavior of 1-Methoxy-2,3,7-trioxabicyclo[2.2.1]hept-5-ene
AU Iesce, M. Rosaria; Cermola, Flavio; **Guitto, Antonio**; Scarpati, Rachele; Graziano, M. Liliana
CS Dipartimento di Chimica Organica e Biologica, Universita di Napoli Federico II, Naples, I-80134, Italy
SO Journal of Organic Chemistry (1995), 60(16), 5324-7
CODEN: JOCEAH; ISSN: 0022-3263
PB American Chemical Society
DT Journal
LA English
AB The reexamn. of the behavior of the endo-peroxide 1-methoxy-2,3,7-trioxabicyclo[2.2.1]hept-5-ene shows that in participating solvents it yields acyclic or cyclic adducts.

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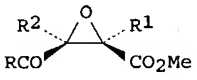
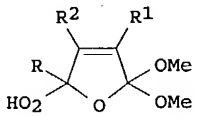
L18 1 "GUITTO A"/AU

=> d bib abs

L18 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:974880 CAPLUS
DN 124:145765
TI Photosensitized oxidation of furans. 19. Stereoselective synthesis of functionalized methyl cis-3-aroyl-2,3-epoxypropanoates via 5-aryl-5-hydroperoxy-2,2-dimethoxy-2,5-dihydrofurans
AU Iesce, M. R.; Cermola, F.; **Guitto, A.**; Scarpati, R.; Graziano, M. L.
CS Dipartimento di Chimica Organica e Biologica, Univ. di Napoli Federico II, Naples, I-80134, Italy
SO Synlett (1995), (11), 1161-2
CODEN: SYNLES; ISSN: 0936-5214
PB Thieme
DT Journal
LA English
OS CASREACT 124:145765
GI



I



II

AB Functionalized Me cis-3-aroyl-2,3-epoxypropanoates I (R1 = H, CO2Me, CO2Et; R2 = CO2Me, CO2Et) are synthesized by base treatment of dihydrofurans II, prepared from singlet oxygen oxygenation of the corresponding 5-aryl-2-methoxyfurans in methanol. Screening expts. revealed that the reaction occurs efficiently only when an electron-withdrawing group is bound at C-4 of II.